CONCEPTUAL FISCAL IMPACTS TOOLKIT PROJECT PROPOSAL

FOR THE UTAH GOVERNOR'S OFFICE OF PLANNING AND BUDGET

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I. ABSTRACT

A. INTRODUCTION

Utah was one of the fastest growing states in the United States during the last 15 years due to a natural increase in birth rates and in-migration. An increasing percentage of the population growth and residential development has been occurring in rural areas under county jurisdiction that have little existing municipal incorporation or planning. With the increased demand for local services, many rural counties find themselves with fiscal pressure after approving developments that meet existing zones and land use plans (Burchell et al. 2005). A factor leading to the fiscal pressure is municipal and county planners not having accurate data to evaluate the net fiscal impacts associated with different types of land uses.

B. STATEMENT OF PURPOSE

The purpose of this project is to produce an interactive tool that will allow county or municipal planners and commissioners, as well as interested citizens, of the state of Utah to model the governmental or public impacts associated with different types of land use activities. The toolkit will allow users to simulate various land uses and summarize their associated costs and revenues for a model county that is representative of conditions found in Utah. A main feature of the toolkit will be the ability for the user to choose different patterns of land uses and see the associated fiscal impacts of each scenario. The toolkit will be hosted and supported on the internet by the Utah Governor's Office of Planning and Budget,

C. RESEARCH QUESTIONS

1. What are the municipal/county costs, revenues and services associated with different types and patterns of land use?
2. How many acres of different land uses are needed to support various scenarios of future population growth?

D. MODEL DETAILS, LIMITATIONS, ASSUMPTIONS, AND UNRESOLVED ISSUES

1. ECONOMIC/DEMOGRAPHIC CONDITIONS MODELED

The situation modeled in the tool could be any combination of the four scenarios listed below. If all four were modeled, a drop-box selection menu could be added so that the user could select which of the four conditions they would like to simulate.

a. Wasatch Front county (similar to Davis, Weber, Salt Lake, Utah Counties) – this model could assume a large existing population (200,000+ population),

existing infrastructure, local incorporation, a high percentage of urban land uses and a large demand for continued development.

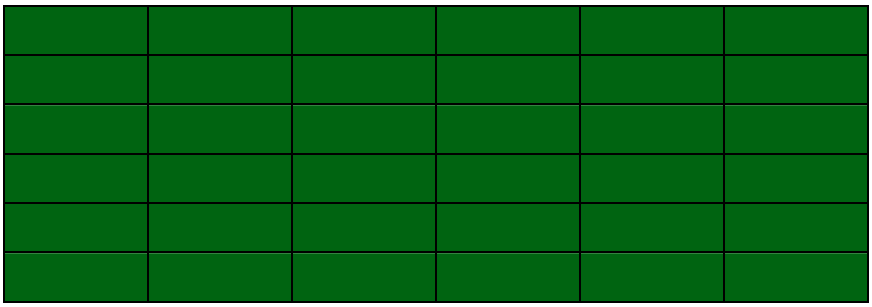
b. Historically rural, rapidly developing county (similar to Summit, Morgan, Cache, Washington, Iron, Tooele, Wasatch Counties) – this model could assume a smaller, but growing population (~100,000 people) and a transition from traditional agricultural land uses to urban/residential/commercial development.
c. Rural county (most other counties in southern, eastern and western Utah) – this model county would have a small population (<50,000 people), limited infrastructure and a lower demand for future development.
d. Custom/manual input – this model could be used by county commissioners or planners familiar with the specific costs associated with local services for their county or municipality. By allowing user input, the model could produce more accurate statistical information.

2. MODEL DESIGN

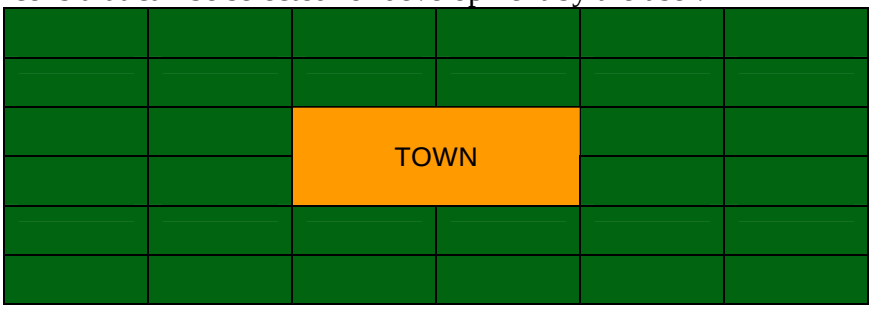
a. FORMAT

The onscreen spatial model format could be designed using one of the following methods:

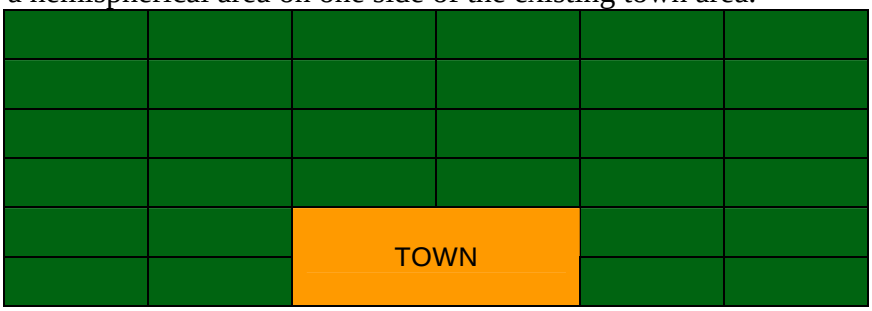
1. As a blank grid (4 x 4 cells, 5 x 5 cells, etc.) where the initial input values of all cells are undeveloped (i.e., blank). With this method, the user would be able to fully manipulate the model to best reflect current conditions.



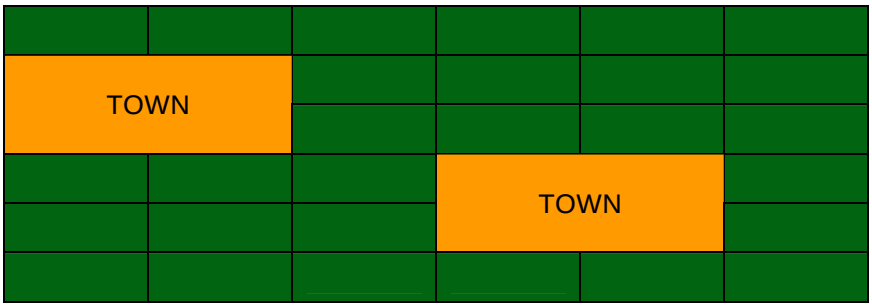
2. As a grid of identical size to method #1, but with a default existing town placed in the central cell or a group of central cells surrounded by cells that can be selected for development by the user.



3. Set up a pre-determined town/community area and then place an array of determinable cells in a radial proximity to the existing town area or as a hemispherical area on one side of the existing town area.



4. A county model, with two or more existing municipalities represented on the base model.



b. CELL SIZE (1 acre, 10 acres, 100 acres, 1 square mile)

The selected cell size should effectively reflect typical zoning areas in an average Utah town.

3. LAND USE OPTIONS

The land uses will be representative of the major land uses in Utah. Each land use will be hyperlinked to a file which will provide the user with detailed information regarding the assumptions and statistics inherent with that land use (e.g., people/acre, infrastructure requirements), as well as information or strategies that detail how to implement that type of land use in municipal or county codes and zoning ordinances.

The following is a list of land uses that could be included in the model:

- Traditional Plan Trend Development
- Urban/High Density
- Suburban/Medium Density
- Rural/Low Density
- Cluster/High Density
- Commercial
- Agricultural
- Industrial
- Infrastructure (Schools, Sewage, Landfill, Power Plant, etc.)

- Mixed Use
- Parks/Open Space
- Public Lands (e.g., Forest Service, BLM, National Park Service)
- Water (Lakes/Rivers/Streams)
- Wetlands
- Critical Lands

4. STATISTICS

The statistics section will display summary statistics for the land uses being modeled in the display window. The statistics will be based on the corresponding net fiscal impact of the different land uses given the different economic/demographic conditions and assumptions (Wasatch Front, Developing, Rural or Custom). The statistics for a particular economic model will be set for each land use, with the possible exception of a manual option, where the user would be allowed to select different values that more accurately represent their particular situation. The pre-determined statistical values will be based on information derived from peer-reviewed literature, data from incorporated municipalities, the Governor's Office of Planning and Budget and local planners.

- Acres utilized for each land use (total number of acres, percentage of each land use)
- Infrastructure installation costs (total cost, cost per acre)
- Infrastructure maintenance costs (total cost for 10/20 years, annual cost)
- Change in property value (percent decrease or increase in value)
- City/County services costs (total cost for 10/20 years, annual cost)
- Number of people supported (population estimates)
- Change in number of people (total number of people, percent change in population)

An additional feature that could be added to the statistics section is a way for users to override infrastructure costs if developers in their area are required to supply the infrastructure or impact fees associated with new infrastructure.

5. TARGET USER/AUDIENCE

- County Commissioners
- Planning and zoning boards
- Citizens
- Developers
- Economic development agencies

6. STATIC OR DYNAMIC TIMEFRAME?

Will the model be able to predict future maintenance costs based on selected land uses, or will it only reflect present costs of such actions?

7. SOFTWARE REQUIREMENTS

The proposed project will be hosted and accessed through the state of Utah's website. The computer work will consist of web design and database creation. General estimates as to the time and costs for the software development are variable. Reasonable timelines were estimated between three to six months with a budget of $3,000 to $15,000 for the creation and completion of the software.

8. BUDGET

A preliminary estimated cost range for the proposed project is $XXXX

Software Creation and Design:	$XXX
Research:	$XXX
Travel Costs (USU motor pool ~$0.30/mile for 3000 miles):	$XXX
Miscellaneous (Publication, etc.):	$XXX
TOTAL:	$XXXX

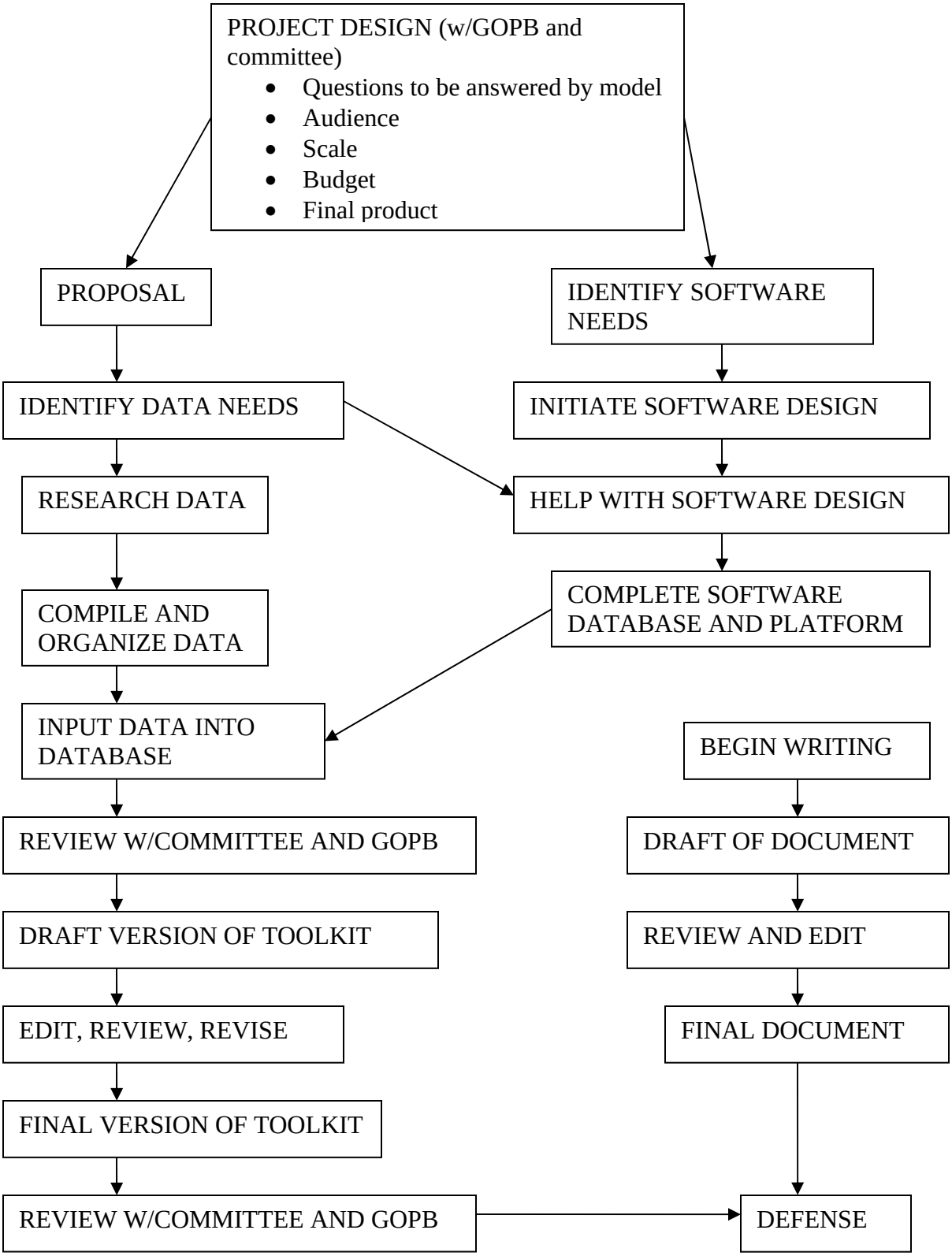
9. OTHER MODEL ASSUMPTIONS

- General/estimated costs for the selected area
- Relative homogeneity between selectable cells (no variability in terrain, rivers, views, neighborhood quality)

II. LITERATURE REVIEW

Burchell, Robert W., Anthony Downs, Barbara McCann, and Sahan Mukherji. 2005. *Sprawl Costs*. Washington, DC: Island Press.

III. METHODOLOGY FLOWCHART



POTENTIAL PROJECT LAYOUT